Modified PTO/SB/33 (10-05)

PRE-APPEAL BRIEF REQUEST FOR REVIEW	Docket Number Q76541	
Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	Application Number 10/621,390	Filed July 18, 2003
	First Named Inventor Hyun-doo SHIN	
	Art Unit 2621	Examiner Anand Shashikant Rao

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Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal

The review is requested for the reasons(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

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December 13, 2006
Date

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Hyun-doo SHIN, et al.

Docket No: Q76541

Appln. No.: 10/621,390

Group Art Unit: 2621

Confirmation No.: 2463

Examiner: Anand Shashikant Rao

Filed: July 18, 2003

For: DIGITAL VIDEO PROCESSING METHOD AND APPARATUS THEREOF

PRE-APPEAL BRIEF REQUEST FOR REVIEW

MAIL STOP AF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to the new Pre-Appeal Brief Conference Pilot Program, and further to the Examiner's Final Office Action dated July 13, 2006, Applicant files this Pre-Appeal Brief Request for Review. This Request is also accompanied by the filing of a Notice of Appeal.

Applicant turns now to the rejections at issue:

Claims 1-55 are pending in the application. Claims 1-48 have been withdrawn. Claims 49-55 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Ratakonda (U.S. Patent No. 5,956,026). Applicant submits that the rejection of these claims is improper, as evidenced by the following.

Claim 49 recites in part:

> a motion intensity level calculation unit calculating motion intensity levels indicating a motion intensity of respective inter frames included in an input video data by using motion compensation information of the respective inter frames;

and a histogram calculation unit calculating a histogram indicating frequency of the respective motion intensity levels based on the motion intensity levels of respective inter frames.

Ratakonda teaches a method of hierarchical digital video summarization (determining the most salient (prominent) frames of a given video sequence that may be used as a representative of the video) (column 2, lines 13-35) and browsing, which includes inputting a digital video signal for a digital video sequence (column 3, lines 21-30) and generating a hierarchical summary based on keyframes of the video sequence (column 3, lines 51-62). The hierarchical summarization consists of multiple levels, where levels vary in terms of detail (number of frames) (column 2, lines 28-35). The coarsest, or most compact level provides the most salient frames and contains the least number of frames (column 2, lines 28-35).

The rejection of claim 49 is in error because there is no teaching or suggestion in Ratakonda of a motion intensity level calculation unit calculating motion intensity levels indicating a motion intensity of respective inter frames included in an input video data by using motion compensation information of the respective inter frames; and a histogram calculation unit calculating a histogram indicating frequency of the respective motion intensity levels based on the motion intensity levels of respective inter frames as recited in claim 49. The Examiner appears to read the motion vectors as taught by Ratakonda (column 11, lines 35-61) on the claimed motion intensity. Applicant respectfully disagrees.

Ratakonda teaches the use of motion characteristics for video summarization. Motion, such as pan or zoom are detected by computing motion vectors (column 11, lines 28-35). A pre-

screening method is used to detect all possible sequences of frames with dominant motion (i.e., motion caused by pan or zoom) (column 11, lines 36-43). A change of intensity in the edge pixels of a video frame or image is used to detect the dominant motion, and thus detect pan and zoom (column 11, line 26 to column 12, line 50).

Nowhere does Ratakonda disclose calculating motion intensity levels indicating a motion intensity of respective inter frames included in an input video data by using motion compensation information of the respective inter frames, and calculating a histogram indicating frequency of the respective motion intensity levels based on the motion intensity levels of respective inter frames. The only mention of any type of motion intensity is related to pre-screening for dominant motion, that is, motion caused by pan or zoom in the video (column 11, lines 35-55). There is no disclosure with respect to use of motion compensation information of respective inter frames.

The Examiner asserts that "[t]he action measures of the block histograms read on the "motion intensity levels" of the claims since the action measures are used to find insistences (sic) of fine motion (less intensive motion characteristics)."[1] Applicant finds this assertion confusing. It is unclear how block histogram action measures would read on motion intensity levels.

Accordingly, claim 49 should be allowable over Ratakonda, because the cited reference does not teach or suggest all of the features of the claim. Claims 50-55 should also be allowable at least based on their dependency on independent claim 49.

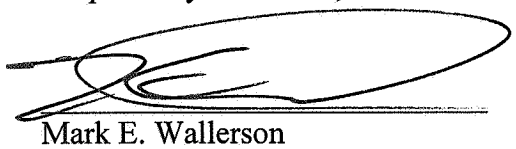
[1] Page 3 of the Office Action dated July 13, 2006.

Conclusion

For at least the foregoing reasons, the rejection of claims 49-55 is improper.

Accordingly, reversal of the Examiner's rejection of these claims is requested.

Respectfully submitted,



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